

TURBINE BUCKET TIP SHROUD EDGE PROFILE

ABSTRACT OF THE DISCLOSURE

A turbine bucket includes a bucket airfoil having a tip shroud with leading and trailing edges defining leading and trailing edge profiles substantially in accordance with Cartesian coordinate values of X and Y at points 12-20 and 1-11, respectively, set forth in Table I. The X and Y values are distances in inches which, when respective points 12-20 and 1-11 are connected by smooth, continuing arcs, define the leading and trailing edge tip shroud profiles. An airfoil profile at 95% span is defined by Cartesian coordinate values of X, Y and Z in Table II having the same X, Y origin along the radial Z axis as the origin of Table I. The profiled leading and trailing edges of the tip shroud relative to the airfoil profile afford optimum tip shroud mass distribution which maximizes creep life of the bucket. Stage efficiency is also improved by providing a tip shroud covering the airfoil throat.